REMARKS

In the non-final Office Action claims 35-39 are presently pending and claims 35-39 stand rejected as being anticipated under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,188,106 to Nappholz et al. ("Nappholz") in view of U.S. Pat. No. 5,314,430 to Bardy ("Bardy") and further in view of U.S. Pat. No. 5,139,020 to Koestner et al. ("Koestner").

Applicant hereby reaffirms the prior withdrawal and cancellation of claims 1-34 and 40-42, and adds new claims 43-44. Applicant herewith provides the requested claim for domestic priority to it parent case. Applicant also responds to the objection to Figures 4 and 5 (and accompanying rejection of the specification) with minor amendments to page 9, the first paragraph on page 10 and corrects the "circuit 74" to "circuit 63" (miscellaneous locations throughout several pages of the specification). In addition, Applicant herewith tenders proposed modifications to correct Figure 3 (i.e., adding reference numeral 22 to the representation of a "flow" sensor and to change "74" to "63").

The present Amendment is intended to place the application in condition for allowance, avoid raising additional issues and not require any additional searching or application of prior art.

Applicant respectfully requests entry and favorable consideration of the remarks and amendments tendered herewith.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Nappholz describes (e.g., at col. 8, lines 30-31) and claims (e.g., at claim 1, and throughout the specification), "usage of only conventional catheter-based ***right heart*** techniques" (emphasis added). For example, claim 1 of Nappholz recites the following: characterized in that said ultrasonic means is adapted to be implanted within the patient's **right heart** and fixably

positioned therein to ensonify the patient's ascending aorta with ultrasonic energy such that said ultrasonic means detects returning ultrasonic energy predominantly reflected from blood cells within the ascending aorta and monitors said at least one volume of blood flow parameter.

Furthermore, inspection of Nappholz reveals that the reference is completely devoid of any mention or depiction of any ***left ventricle-based*** chronic flow measurements, computation or the like, in complete contrast to the present application.

Similarly, Applicants respectfully assert that Bardy offers no motivation, suggestion or inference to attempt to declare an episode of myocardial ischemia based on a left-sided flow sensor. In fact, Bardy fails to even mention the phrase "blood pressure" or "flow" or any other concept central to the presently claimed invention. Thus, Bardy offers no additional teaching over or above the disclosure provided by Nappholz (which has already been shown lacking in several important respects vis-à-vis the claimed invention).

Finally, Koestner provides nothing over or above Nappholz or Bardy (and in fact was commonly-owned, purportedly commonly invented and based in large part upon the drawings and text of Nappholz).

In fact, the Summary portion of Koestner provides, in part:

> In accordance with one aspect of the present invention, there is provided a cardiac monitoring and therapy device which controls blood flow in a patient's cardiovascular system by accurately measuring at least one systolic time interval using Doppler ultrasound techniques to detect cardiac mechanical events. The invention utilizes a Doppler ultrasound measuring transducer mounted on a catheter which is implanted in one of the right chambers of the heart so that the sonic axis of the ultrasound beam is directed toward the left ventricle or aortic root. In the preferred embodiment of the invention, a miniature ultrasound transducer is implanted in the superior vena cava or high right atrium with its sensing field of view directed towards the ascending aorta. This method of implantation enables highly accurate detection of

changes in the relative amount of blood flowing from the left ventricle of the heart. (emphasis added.)

It is thus apparent that Nappholz and Koestner share the common theme of detecting blood flow from the left ventricle which – physiologically speaking, does not correspond to any known measure of myocardial ischemia (i.e., relatively reduced blood flow through the coronary veins) which the presently claimed invention deals with the latter.

In addition, and perhaps most striking, is the fact that not one of the references applied in the present Office Actiono – not Nappholz, not Bardy, and not Koestner - even mention the term "ischemia" (or "ischemic") anywhere within the four corners of the references. For the above and foregoing reasons, Applicant respectfully asserts that the rejection of claims 35-39 fails to meet the minimum threshold of forming the basis for a *prima facie* rejection grounded in obviousness.

As a result the Examiner should withdraw the present grounds of rejection and allow the pending claims.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited so that the claimed invention may proceed to timely issuance as U.S. Letters Patent.

The Examiner is invited to contact the undersigned to discuss any issues related to the present application.

Respectfully submitted,

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